

Amendments to the Specification:

Please amend the paragraph at page 8 lines 3-12 as follows:

As shown in Fig. 6, the jaw crusher 30 has a crusher frame 34 in which left and right side wall plates 31 are linked to each other by a rear wall plate 32 and a cross member 33. The rear wall plate 32 is reinforced by plural ribs. A fixed jaw 35 is attached to the inside of the rear wall plate 32. A swing jaw 36 whose tooth surface stands substantially vertically is provided in the front of the fixed jaw 35. The swing jaw 36 hangs, ~~in its~~ at an upper side thereof, on an eccentric part of a main shaft 37 which is rotatably bridged between the side wall plates 31. The swing jaw 36 is also supported, ~~in its~~ at a lower side thereof, by a reaction force receive link mechanism (reaction force receiver mechanism) 60 which receives reaction force generated by crushing. Further, a tension link mechanism (toggle plate holder mechanism) 70 constantly biases the swing jaw 36 to the reaction force receive link mechanism 60.

Please amend the paragraph at page 8 lines 13-23 as follows:

The reaction force receive link mechanism 60 substantially includes a toggle plate 61 having an end engaged on a rear part of the swing jaw 36, toggle links (toggle plate support members) 64 which support the other end of the toggle plate 61 and rotate about the link pin 63 as a rotation center thereof, and bear lock cylinders 65 having lower ends pivoted on the toggle links 64. Each bear lock cylinder 65 is rotatably pivoted on the side of the cross member 33 (trunnion structure). Further, the rod 66 of each bear lock cylinder 65 is extended and retracted so that an outlet clearance W between the lower ends of the jaws 35 and 36 can be adjusted. That is, the reaction force receive link mechanism 60 serves as an outlet clearance adjustment link mechanism (outlet clearance adjustment mechanism) 62 which moves the swing jaw 36 near to and away from the fixed jaw 35 through the toggle links 64 and the toggle plate 61 by driving the bear lock cylinders 65.

Please amend the paragraph at page 8 lines 24-29 as follows:

The tension link mechanism 70 is positioned at the substantial center of the reaction force receive link mechanism 60. The tension link mechanism 70 substantially includes a tension link 71 having an end pivoted on the side of the swing jaw 36, a tension lever 72 rotatably pivoted on a fixed link pin 63, a tension rod 73 having an end pivoted on the tension lever 72, and a tension spring (biasing portion) 74 which biases the tension rod 73 in a predetermined direction. The tension rod 73 and the tension spring 74 are assembled on the toggle links 64.

Please amend the paragraph at page 9 lines 1-7 as follows:

In the jaw crusher 30 as described above, a pulley 38 provided at an end of a main shaft 37 is driven by a hydraulic motor 39 through a V-belt. With the rotation of the main shaft 37, the swing jaw 36 functions as a swinging link and crushes raw materials between the swing jaw 36 and the fixed jaw 35. At this time, in the jaw crusher 30 according to the present embodiment, the reaction force receive link mechanism 60 adopts the up-thrust type, so that the swing jaw 36 swings downward from upside as if the tooth surface of the fixed jaw 35 is scraped.

Please amend the paragraph at page 9, line 28 to page 10, line 4 as follows:

In Fig. 6, the jaw crusher 30 has the fixed jaw 35 fixed to the rear wall plate 32, and the swing jaw 36 which swings relative to the fixed jaw 35, as described above. Provided on the rear surface of the swing jaw 36 are the reaction force receive link mechanism 60 which receives reaction force from the swing jaw 36, and the tension link mechanism 70 which biases the swing jaw 36 with a predetermined bias toward the reaction force receive link mechanism 60.

Please amend the paragraph at page 10, lines 5-6 as follows:

The reaction force receive link mechanism 60 includes a link having the toggle plate 61, toggle links 64, and bear lock cylinders 65, as described above.

Please amend the paragraph at page 10, lines 7-18 as follows:

As shown in Figs. 7 and 8, the toggle plate 61 is a plate-like member which contacts the rear surface of the swing jaw 36 throughout the overall width of the jaw 36. The toggle plate 61 contacts the swing jaw 36 in an oblique upward direction from downside, so that the reaction force receive link mechanism 60 is of the up-thrust type. An end of the toggle plate 61 contacts a contact portion 361 provided on the rear surface of the swing jaw 36. The other end of the toggle plate 61 contacts contact portions 641 provided on the toggle links 64. Thus, the toggle plate 61 is sandwiched between the swing jaw 36 and the toggle links 64. Concave portions 362 and 642 each having a substantially arc-like section with a radius R indicated by an arrow in Fig. 7 are formed on the contact portions 361 and 641. The toggle plate 61 can swing about swinging centers S2 which are the centers of the arcs of the concave portions 362 and 642. In the width-directional center of the toggle plate 61, a notch 611 is formed on the side close to the toggle links 64.

Please amend the paragraph at page 11, lines 21-28 as follows:

According to this reaction force receive link mechanism 60, the reaction force generated when raw materials are crushed is received by the fixed link pin 63 of the toggle links 64 and the support portions 68 of bear lock cylinders 65 through the toggle plate 61. If, as described above, hydraulic pressure is applied between the pistons of the bear lock cylinders 65 and the cylinder bodies 67 to release the lock and if the rods 66 are extended and retracted, the swing jaw 36 is moved near to and away from the fixed jaw 35 by the toggle links 64 and the toggle plate 61. That is, the reaction force receive link mechanism 60 also functions as the outlet clearance adjustment link mechanism 62.

Please amend the paragraph at page 11 line 29 to page 12 line 3 as follows:

The tension link mechanism 70 is provided at the substantial center in the width direction of the swing jaw, between two toggle links 64 as shown in Figs. 7 and 8. The tension link mechanism 70 is a link mechanism having the tension link 71, tension lever 72, tension rod 73, and tension spring 74, as described above.

Please amend the paragraph at page 13, lines 2-9 as follows:

At first, the hydraulic motor 39 is driven to rotate the pulley 38 through the V-belt and further the main shaft 37. The swing jaw 36 pivoted on the eccentric part of the main shaft 37 then swings. At this time, the toggle plate 61 swings about the swing center S2 at the side of the toggle links 64 because the swing jaw 36 is supported at its lower side by the reaction force receive link mechanism 60 of the up-thrust type. Accordingly, the swing jaw 36 swings to move near to and away from the fixed jaw. By this swinging action, the swing jaw 36 and the fixed jaw 35 crush raw materials thrown between both jaws, and discharge crushed materials to the discharge conveyor 50 from the outlet clearance W between the lower ends.

Please amend the paragraph at page 13, lines 15-24 as follows:

Meanwhile, to change the grain size of crushed materials, the outlet clearance adjustment link mechanism 62 is operated. Hydraulic pressure is applied between the pistons of the bear lock cylinders 65 and the cylinder bodies 67, so that the cylinder bodies 67 are slightly expanded to reduce resistance between them. The lock depending on the interference-fit is thus released. In this state, hydraulic pressure is applied to the side of the heads of the cylinder bodies 67 or to the side of the bottoms, to extend and retract the rods 66. Accordingly, the toggle links 64 rotate about the fixed link pin 63. The toggle plate 61 then moves so that the swing jaw 36 moves near to or away from the fixed jaw 35. The outlet clearance W between the lower ends of the swing jaw 36 and the fixed jaw 35 is thus adjusted to change the grain size of the crushed materials.

Please amend the paragraph at page 13, line 25 to page 14,
line 6 as follows:

At this time, in the tension link mechanism #0, the tension link 71 moves and the tension lever 72 rotates, as the swing jaw 36 moves near to and away from the fixed jaw 35. Also at this time, the swing centers S1 of the tension link 71 are respectively near the swing centers S2 of the toggle plate 61. The rotation centers of the tension lever 72 and the toggle links 64 are the common fixed link pin 63. Therefore, the trajectory of the tension link 71 is approximate to the trajectory of the toggle plate 61. The tension lever 72 accordingly rotates by an angle substantially equal to the rotation angle of the toggle links 64. As a result, the contact portion 731 of the tension rod 73 attached to the tension lever 72 and the contact portion 732 fixed to the mount portion 644 of the toggle links 64 does not substantially change their positions relative to each other. The bias of the tension spring 74 is kept substantially constant even when the outlet clearance W is changed.

Please amend the paragraph at page 14, lines 10-16 as follows:

(1) The tension link mechanism 70 constitutes a link having the tension link 71, tension lever 72, tension rod 73, and tension spring 74. Therefore, the layout angles of the tension link 71 and the tension rod 73 at the tension lever 72 can be changed so that the freedom of layout in the height direction can be enhanced. Accordingly, the tension rod 73 can be positioned obliquely upward in a frontward direction. Therefore, the tension rod 73 and the tension spring 74 do not protrude toward the discharge conveyor 50 below the swing jaw 36, and crushed materials can be discharged excellently.

Please amend the paragraph at page 14, lines 17-20 as follows:

On the contrary, even in the jaw crusher including the reaction force receive link mechanism 60 of the up-thrust type, the tension link mechanism 70 can be positioned without increasing the overall height. Hence, the height limit is surely satisfied even when the jaw crusher 30 is mounted on a self-propelled crushing machine 1.

Please amend the paragraph at page 15, lines 25-27 as follows:

Note that the toggle plate 61 need not be divided ~~limitedly~~ into only two pieces but may be divided into a number of pieces corresponding to the number of provided tension link mechanisms 70.

Please amend the paragraph at page 16, line 23 to page 17, line 1 as follows:

The tension link mechanism 70 is provided in the substantial center of the swing jaw 36 in its width direction. However, as shown in Figs. 13 and 14, a pair of tension link mechanisms may be provided on both sides of the toggle plate 61. In Figs. 13 and 14, the toggle links 64 are provided close to each other, and are linked to each other by a cylindrical link portion 643. The toggle links 64 are fixed to a rotation link pin 69. Therefore, the rotation link pin 69 rotates together with toggle links 64. The rotation link pin 69 is rotatably supported by mount portions 333 each of which has a substantially center portion protruding below the cross member 33.

Please amend the paragraph at page 17, lines 8-16 as follows:

In the jaw crusher having this structure, the tension link mechanism 70 includes links. Therefore, the tension rod 73 and the tension spring 74 do not protrude to the side of the discharge conveyor 50 ~~but~~ and excellent discharging performance can be achieved. When the rods 66 of the bear lock cylinders 65 are extended and retracted, the toggle links 64 rotate together with the rotation link 69, so that the outlet clearance W between the swing jaw 36 and the fixed jaw 35 can be adjusted like the foregoing embodiment. At this time, since the tension spring 74 is attached to the toggle links 64, the bias does not substantially change even if the outlet clearance is adjusted. It is hence unnecessary to adjust the bias, and the outlet clearance adjustment can be achieved easily.